UniProtKB/Swiss-Prot family/domain classification: TGF-beta family

Family/domain

TGF-beta family

Hierarchical classification

- all families and domains
  - family
    - **TGF-beta family**
      - TGF-beta family. GDNF subfamily

CC SIMILARITY line

This is the list of all UniProtKB/Swiss-Prot entries containing the line:

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CC -!- SIMILARITY: Belongs to the TGF-beta family.
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extracted from the index of CC SIMILARITY lines.

UniProtKB/Swiss-Prot entries

TGF-beta family

60A_DROME	(P27091),	60A_DROVI	(Q24735),	BMP10_HUMAN	(O95393),
BMP10_MOUSE	(Q9R229),	BMP15_HUMAN	(O95972),	BMP15_MOUSE	(Q9Z0L4),
BMP15_SHEEP	(Q9MZE2),	BMP2A_XENLA	(P25703),	BMP2B_XENLA	(P30884),
BMP2_CHICK	(Q90751),	BMP2_DAMDA	(O19006),	BMP2_HUMAN	(P12643),
BMP2_MOUSE	(P21274),	BMP2_RABIT	(O46564),	BMP2_RAT	(P49001),
BMP3B_HUMAN	(P55107),	BMP3B_MOUSE	(P97737),	BMP3B_RAT	(P55108),
BMP3B_XENLA	(Q7T2X6),	BMP3_BOVIN	(P22444),	BMP3_HUMAN	(P12645),
BMP3_MOUSE	(Q8BHE5),	BMP3_RAT	(P49002),	BMP3_XENLA	(Q7T2X7),
BMP4_CHICK	(Q90752),	BMP4_DAMDA	(Q29607),	BMP4_HUMAN	(P12644),
BMP4_MOUSE	(P21275),	BMP4_RABIT	(O46576),	BMP4_RAT	(Q06826),
BMP4_XENLA	(P30885),	BMP5_HUMAN	(P22003),	BMP5_MOUSE	(P49003),
BMP6_HUMAN	(P22004),	BMP6_MOUSE	(P20722),	BMP6_RAT	(Q04906),
BMP7_CANFA	(P34819),	BMP7_HUMAN	(P18075),	BMP7_MOUSE	(P23359),
BMP7_XENLA	(P30886),	BMP8A_MOUSE	(P34821),	BMP8B_HUMAN	(P34820),
BMP8B_MOUSE	(P55105),	DAF7_CAEEL	(P92172),	DECA_DROME	(P07713),
DECA_DROPS	(P91699),	DECA_DROSI	(P91706),	DECA_TRICA	(Q26974),
DSL1_CHICK	(P34822),	DVR1_BRARE	(P35621),	DVR1_STRPU	(P48969),
DVR1_XENLA	(P09534),	GDF11_HUMAN	(O95390),	GDF11_MOUSE	(Q9Z1W4),
GDF11_RAT	(Q9Z217),	GDF15_HUMAN	(Q99988),	GDF15_MOUSE	(Q9Z0J7),
GDF15_RAT	(Q9Z0J6),	GDF1_HUMAN	(P27539),	GDF1_MOUSE	(P20863),
GDF2_HUMAN	(Q9UK05),	GDF2_MOUSE	(Q9WV56),	GDF3_HUMAN	(Q9NR23),
GDF3_MOUSE	(Q07104),	GDF5_HUMAN	(P43026),	GDF5_MOUSE	(P43027),
GDF6_BOVIN	(P55106),	GDF6_MOUSE	(P43028),	GDF7_CERAE	(Q9BDW8),
GDF7_HUMAN	(Q7Z4P5),	GDF7_MOUSE	(P43029),	GDF8_AEPME	(Q5USV7),
GDF8_ALOLA	(Q6J1J2),	GDF8_ANTAM	(Q5USV5),	GDF8_BOSGA	(Q5USW1),

GDF8_BOSIN (Q5RZV4), GDF8_BOVIN (O18836), GDF8_BRARE (O42222),
GDF8_BUBBU (Q6X5V1), GDF8_CANFA (Q6UKZ8), GDF8_CAPHI (Q6T5B8),
GDF8_CAPIB (Q5USV9), GDF8_CHICK (O42220), GDF8_HEMJE (Q5USV8),
GDF8_HORSE (Q9GM97), GDF8_HUMAN (O14793), GDF8_LEPCA (Q8HY52),
GDF8_MACFA (Q95J86), GDF8_MELGA (O42221), GDF8_MOUSE (O08689),
GDF8_PAPHA (O18828), GDF8_PIG (O18831), GDF8_RAT (O35312),
GDF8_SHEEP (O18830), GDF8_SYLGR (Q5USV6), GDF8_TAUDE (Q5USW0),
GDF8_VULVU (Q6DTL9), GDF9_CAPHI (Q66NC0), GDF9_HUMAN (O60383),
GDF9_MOUSE (Q07105), GDF9_SHEEP (O77681), INHA_BOVIN (P07994),
INHA_CHICK (P43031), INHA_HORSE (P55101), INHA_HUMAN (P05111),
INHA_MOUSE (Q04997), INHA_PIG (P04087), INHA_RAT (P17490),
INHA_SHEEP (P38440), INHA_TRIVU (O77755), INHBA_BOVIN (P07995),
INHBA_CHICK (P27092), INHBA_HORSE (P55102), INHBA_HUMAN (P08476),
INHBA_MOUSE (Q04998), INHBA_PIG (P03970), INHBA_RAT (P18331),
INHBA_SHEEP (P43032), INHBB_BOVIN (P42917), INHBB_CHICK (P27093),
INHBB_HUMAN (P09529), INHBB_MOUSE (Q04999), INHBB_PIG (P04088),
INHBB_RAT (P17491), INHBC_HUMAN (P55103), INHBC_MOUSE (P55104),
INHBC_RAT (Q9WUK5), INHBE_HUMAN (P58166), INHBE_MOUSE (O08717),
INHBE_RAT (O88959), INHB_DROME (O61643), LEFTB_HUMAN (O75610),
LEFTB_MOUSE (P57785), MIS_BOVIN (P03972), MIS_HUMAN (P03971),
MIS_MOUSE (P27106), MIS_PIG (P79295), MIS_RAT (P49000),
NODAL_HUMAN (Q96S42), NODAL_MOUSE (P43021), SCW_DROME (P54631),
TGFB1_BOVIN (P18341), TGFB1_CANFA (P54831), TGFB1_CAVPO (Q9Z1Y6),
TGFB1_CERAE (P09533), TGFB1_CHICK (P09531), TGFB1_CYPCA (Q9PTQ2),
TGFB1_HORSE (O19011), TGFB1_HUMAN (P01137), TGFB1_MOUSE (P04202),
TGFB1_ONCMY (O93449), TGFB1_PIG (P07200), TGFB1_RAT (P17246),
TGFB1_SHEEP (P50414), TGFB1_XENLA (P16176), TGFB2_BOVIN (P21214),
TGFB2_CERAE (P61811), TGFB2_CHICK (P30371), TGFB2_HUMAN (P61812),
TGFB2_MOUSE (P27090), TGFB2_PIG (P09858), TGFB2_RAT (Q07257),
TGFB2_XENLA (P17247), TGFB3_CHICK (P16047), TGFB3_HUMAN (P10600),
TGFB3_MOUSE (P17125), TGFB3_PIG (P15203), TGFB3_RAT (Q07258),
TGFB4_HUMAN (O00292), TGFB4_MOUSE (Q64280), UNIV_STRPU (P48970)

TGF-beta family. GDNF subfamily
GDNF_HUMAN (P39905), GDNF_MOUSE (P48540), GDNF_RAT (Q07731),
NRTN_HUMAN (Q99748), NRTN_MOUSE (P97463), PSPN_HUMAN (O60542),
PSPN_MOUSE (O70300), PSPN_RAT (O70301)

Science. 1990 Mar 16;247(4948):1306-10. Related Articles, Links

Deciphering the message in protein sequences: tolerance to amino acid substitutions.

Bowie JU, Reidhaar-Olson JF, Lim WA, Sauer RT.

Department of Biology, Massachusetts Institute of Technology, Cambridge 02139.

An amino acid sequence encodes a message that determines the shape and function of a protein. This message is highly degenerate in that many different sequences can code for proteins with essentially the same structure and activity. Comparison of different sequences with similar messages can reveal key features of the code and improve understanding of how a protein folds and how it performs its function.

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